IN THE CLAIMS:

The following is a complete listing of claims in this application.

Claims 1-14 (canceled).

15. (currently amended) A method for producing a gas permeable substrate for supporting an object for processing, the substrate comprising carbon and having pore channels for carrying gas interspersed through the substrate, the substrate having a first lateral surface at which the object is supported, and an opposite lateral surface, comprising the steps of:

~~producing~~ obtaining a framework formed of at least one of a felt, a non-woven material and a fabric, and made of at least one of carbon fibers and SiC fibers, and

stabilizing the framework by at least one of vapor impregnation and fluid impregnation to form thereby ~~with~~ at least one pyrocarbon and/or silicon carbide coating that forms a matrix, such that the stabilized framework has a porosity level that forms the pore channels,

said pore channels being disposed between the first lateral surface and the opposite lateral surface, and opening onto the first lateral surface and the opposite lateral surface, to enable gas flow from the opposite lateral surface to the first lateral surface for treatment of the object by the gas which has passed through the pore channels.

Claims 16-17 (canceled).

18. (previously presented) A method according to claim 15, wherein the fibers are stabilized solely with carbon or solely with silicon carbide.

Claim 19 (canceled).

20. (previously presented) A method according to claim 15, wherein the fibers are stabilized with a graduated system of coatings that transitions from carbon to silicon carbide.

21. (previously presented) A method according to claim 15, wherein the stabilized framework has a porosity p, where $5\% \leq p \leq 95\%$.

22. (previously presented) A method according to claim 15, wherein the stabilized framework has at least one planar surface.

23. (new) A method according to claim 15, wherein the at least one of a felt, a non-woven material and a fabric is converted to at least one of carbon fibers and SiC fibers by high-temperature carbonization.